

**AN ACCELERATED WEIGHT DROP FOR USE AS A  
SEISMIC ENERGY SOURCE AND A METHOD OF OPERATION THEREOF**

**ABSTRACT OF THE DISCLOSURE**

The present invention provides an accelerated weight drop for use as a seismic energy source, a method for operating an accelerated weight drop for use as a seismic energy source, and a seismic survey system including the accelerated weight drop. The accelerated weight drop, among other elements, may include a striker positionable over a surface, and a compressed gas spring configured to drive the striker toward the surface thus creating seismic waves within the surface. In this embodiment the striker is slidably coupled to the compressed gas spring.